

CLAIMS:

- 1 1. A blank for forming a building element, the
2 blank comprising:
3 an elongate body portion (10) having first and
4 second ends and a plurality of transverse fold lines
5 (22) which divide the body portion (10) into a
6 plurality of panels (14,16,18,20), the panels
7 (14,16,18,20) each having first and second
8 longitudinal edges;
9 one or more first tab members (44) extending
10 from the first end of the body portion (10); and
11 one or more first apertures (42) adjacent the
12 second end of the body portion (10);
13 wherein each of said plurality of panels
14 (14,16,18,20) has at least one second tab (34)
15 extending from said first longitudinal edge and a
16 side flange portion (24) adjacent said second
17 longitudinal edge, and wherein each side flange
18 portion (24) is provided with at least one second
19 aperture (32).
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- 21 2. The blank of Claim 1, wherein each side flange
22 portion (24) is divided from its respective panel
23 (14,16,18,20) by a longitudinally extending fold
24 line (23) which extends along the length of the body
25 portion (10), and wherein the side flange portions
26 (23) are adapted to be folded substantially
27 perpendicular to their respective panels
28 (14,16,18,20).
29

1 3. The blank of either preceding claim, wherein
2 the body portion (10) has an end flange portion (38)
3 adjacent the second end thereof, the at least one
4 first aperture (42) being formed in the end flange
5 portion (38).

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7 4. The blank of any preceding claim, wherein the
8 end flange portion (38) is divided from the body
9 portion by one of the plurality of transverse fold
10 lines (40), and wherein the end flange portion (38)
11 is adapted to be folded substantially perpendicular
12 to the body portion (10).

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14 5. The blank of any preceding claim, wherein one
15 or more of the panels (14,16,18,20) includes a
16 strengthening formation thereon.

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18 6. The blank of any preceding claim, wherein one
19 or more of the panels (14,16,18,20) is provided with
20 a third aperture adapted to receive a reinforcing
21 means.

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23 7. The blank of any preceding claim, wherein the
24 building element is a building block (12).

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26 8. The blank of any preceding claim, the blank
27 being formed from sheet metal.

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29 9. The blank of any of Claims 1 to 7, the blank
30 being formed from sheet plastics.

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1 10. A building block (12) formed from the blank
2 according to any of Claims 1 to 9.

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4 11. A building element comprising:
5 a body portion (101,201,401) having first and
6 second ends and comprising a plurality of integrally
7 formed panels adapted to define the perimeter of the
8 building element, wherein each panel has first and
9 second longitudinal edges;

10 at least one first connecting member
11 (104,204,304,402) adapted to be attached to the
12 panels adjacent their first longitudinal edges;

13 at least one second connecting member
14 (102,202,302,402) adapted to be attached to the
15 panels adjacent their second longitudinal edges; and

16 a third connecting member (106,206,306,406)
17 adapted to be attached to the body portion
18 (101,201,401) adjacent the first end thereof;

19 wherein the first and second connecting members
20 are provided with first and second attachment means,
21 respectively, each of the attachment means being
22 adapted to attach the building element to an
23 adjacent building element, and wherein the third
24 connecting member (106,206,306,406) is adapted so as
25 to engage the second end of the body portion
26 (101,201,401).

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28 12. The building element of Claim 11, further
29 comprising a fourth connecting member
30 (108,208,308,408) adapted to be attached to the body
31 portion (101,201,401) adjacent the second end

1 thereof, wherein the third and fourth connecting
2 members are adapted so as to be mutually engagable.

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4 13. The building element of Claim 12, wherein the
5 third and fourth connecting members are each
6 provided with a resilient engagement member adapted
7 to engage with one another.

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9 14. The building element of Claim 12, wherein the
10 third connecting member (106) includes one or more
11 apertures (142) therein, and the fourth connecting
12 member (108) includes one or more tabs (144)
13 projecting therefrom for engagement with the
14 apertures (142) in the third connecting member
15 (106).

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17 15. The building element of any of Claims 11 to 14,
18 wherein the first and second connecting members are
19 each formed from a single piece of material and each
20 is adapted to follow the perimeter of the building
21 element.

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23 16. The building element of any of Claims 11 to 14,
24 wherein the building element comprises a plurality
25 of first and second connecting members attached to
26 each longitudinal edge of each panel.

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28 17. The building element of any of Claims 11 to 16,
29 wherein each of the connecting members is attached
30 to the body portion (101,201,401) using an
31 attachment method selected from the group comprising
32 riveting, gluing and crimping.

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2 18. The building element of any of Claims 11 to 16,
3 wherein each of the connecting members (402) is
4 provided with a plurality of engagement teeth (422)
5 and each panel (420) includes a plurality of cells
6 (403), the teeth (422) being adapted to be inserted
7 in the cells (403).
8

9 19. The building element of Claim 18, wherein each
10 engagement tooth (422) has a first engagement
11 portion (422a) projecting in a first direction and a
12 second engagement portion (422b) projecting in a
13 second, substantially opposite, direction.
14

15 20. The building element of any of Claims 11 to 19,
16 wherein each of the second connecting members
17 (202,302,402) includes a strengthening rib
18 (240,340,440) projecting therefrom.
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20 21. The building element of any of Claims 11 to 20,
21 wherein each of the first connecting members (402)
22 includes a strengthening rib (440) projecting
23 therefrom.
24

25 22. The building element of any of Claims 11 to 21,
26 wherein the first attachment means comprises at
27 least one tab (134) projecting from the first
28 connecting member (104), and the second attachment
29 means comprises at least one aperture (132) adapted
30 to receive the at least one tab (134) of an adjacent
31 building element.
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1 23. The building element of any of Claims 11 to 21,
2 wherein the first attachment means comprises a first
3 fastener element (232) and a detachable fastener
4 member (234) adapted to attach to the first fastener
5 element (232), and the second attachment means
6 comprises a second fastener element (232) adapted to
7 receive a fastener member (234) of an adjacent
8 building element.

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10 24. The building element of any of Claims 11 to 21,
11 wherein the first attachment means comprises a
12 detent (305) projecting from the first connecting
13 member (304), and the second attachment means
14 comprises a resilient catch (342) adapted to engage
15 with the detent (305) of an adjacent building
16 element.

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18 25. The building element of any of Claims 11 to 24,
19 wherein the body portion (101,201,401) is formed
20 from a single sheet of extruded cellular plastics
21 material having a plurality of cells (403) therein.

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23 26. The building element of any of Claims 11 to 25,
24 wherein each connecting member (102,104,106,108) is
25 formed from sheet metal.

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27 27. The building element of any of Claims 11 to 25,
28 wherein the connecting members are formed from a
29 plastics material.

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1 28. The building element of any of Claims 11 to 25,
2 wherein at least one of the connecting members is
3 integrally formed with the body portion.

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5 29. A blank for forming a building element, the
6 blank comprising:

7 an elongate body portion (58,88) having first
8 and second ends and a plurality of first apertures
9 (76,77,89) formed therein; and

10 first and second side portions (64,66,94,96)
11 integrally formed with the body portion (58,88),
12 each side portion (64,66,94,96) being divided from
13 the body portion (58,88) along a first
14 longitudinally extending fold line (68,98);

15 wherein each side portion (64,66,94,96) has at
16 least one second longitudinal fold line
17 (78,91,93,95,97) which divides the side portion
18 (64,66,94,96) into at least two sections, and
19 wherein at least one side portion (64,66,94) has a
20 plurality of tabs (80,99) extending laterally
21 therefrom.

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23 30. The blank of Claim 29, further comprising first
24 and second end flanges (72,87) adjacent the first
25 and second ends of the body portion (58,88), each
26 end flange (72,87) divided from the body portion
27 (58,88) along a transverse fold line (70,85).

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29 31. The blank of either Claim 29 or Claim 30,
30 wherein the plurality of first apertures (76,77) are
31 formed in two substantially parallel lines extending
32 longitudinally along the body portion (58).

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2 32. The blank of any of Claims 29 to 31, wherein
3 each of the first and second side portions (64,66)
4 has a plurality of tabs (80) extending laterally
5 therefrom.

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7 33. The blank of any of Claims 29 to 32, wherein
8 the building element is a door lintel.

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10 34. The blank of either Claim 29 or Claim 30,
11 wherein the plurality of first apertures (89) are
12 formed substantially in a single line extending
13 longitudinally along the body portion (88).

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15 35. The blank of Claim 32, wherein the building
16 element is a window sill.

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18 36. The blank of any of Claims 29 to 35, wherein
19 the blank (58,84) is formed from sheet metal.

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21 37. The blank of any of Claims 29 to 35, wherein
22 the blank (58,84) is formed from a plastics
23 material.